

REMARKS

Withdrawn Claims

Claim 39 has been withdrawn. However, there is no explanation or reason set forth in the Office Action regarding the withdrawal of claim 39. Accordingly, the Applicant respectfully requests reinstatement of withdrawn claim 39.

Allowed Claims

The Applicant thanks the Examiner for the indication that claims 15-23, 41-43, 51, 52, 65 and 67 have been allowed.

Claim Rejections – 35 USC §102 and §103

Claims 45-47, 49, 50, 54, 55, 71 and 73 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,599,086 to Doty, and claim 40 has been have been rejected under 35 U.S.C. §103(a) as being unpatentable over Doty in view of U.S. Patent No. 6,042,582 to Ray.

It is well established that “an invention is anticipated if the same device, including all the claim limitations, is shown in a single prior art reference. Every element of the claimed invention must be literally present, arranged as in the claim.” Richardson v. Suzuki Motor Co. Ltd., 9 USPQ.2d 1913, 1920 (Fed. Cir. 1989).

Claim Amendments

Independent claims 54 and 55 and dependent claims 47 and 49 have been cancelled without prejudice for possible submission in a continuing application. Additionally, dependent claims 46, 50 and 73 have been rewritten in independent form, dependent claim 39 has been amended to depend from rewritten independent claim 73, dependent claim 40 has been amended to depend from rewritten independent claim 50, and dependent claim 45 has been amended to depend from rewritten independent claim 46

Arguments in Support of Patentability

Rewritten Independent Claim 46

Rewritten independent claim 46 recites, among other elements and features, that “said flange portion is formed integral with said stem portion and together define a single-piece, monolithic structure”. The Office Action asserts that the prosthesis 12 comprises an elongated stem 12, and further asserts that the retaining plate 66 has upper and lower sections which respectively define a transverse flange portion and a transverse stop element. Even assuming arguendo that the proffered characterization of the prosthesis 12 and the retaining plate 66 is accepted, the Applicant submits that Doty fails to disclose that the retaining plate 66 “is formed integral with” the prosthesis 12 and “together define a single-piece, monolithic structure”, as recited in independent claim 46.

Indeed, as shown in Figure 7 and as described in the specification, the retaining plate 66 and the prosthesis 12 are not formed integral with one another, nor do these elements “together define a single-piece, monolithic structure”. Instead, the retaining plate 66 and the prosthesis 12 comprise individual components that are separate from one another, and clearly do not together define a single-piece, monolithic structure. Specifically, as illustrated in Figure 7 and as specifically described in the specification, the retaining plate 66 is attached to the prosthesis 12 via machine screws 68. (See column 4, lines 53-55). Moreover, Doty teaches that the retaining plate 66 is attached to the prosthesis 12 after the prosthesis 12 is positioned between the upper and lower vertebral bodies. (See column 4, lines 47-52). Accordingly, Doty fails to disclose, and in fact teaches away from, providing the retaining plate 66 and the prosthesis 12 as “a single-piece, monolithic structure”, as recited in independent claim 46. Furthermore, the Office Action does not set forth any grounds or basis whatsoever as to how the retaining plate 66 is “formed integral with” the prosthesis 12 so as to define “a single-piece, monolithic structure”. Accordingly, a *prima facie* case of anticipation has not been established with regard to independent claim 46.

Since Doty fails to disclose each of the elements and features recited in independent claim 46, the assertion that Doty anticipates independent claim 46 is improper. Accordingly, withdrawal of the rejection of independent claim 46 and allowance of the same is requested.

Claim 45 depends from independent claim 46, and is therefore submitted to be patentable for at least the reasons supporting the patentability of independent claim 46.

Rewritten Independent Claim 50

Rewritten independent claim 50 recites, among other elements and features, that “said elongated driver shaft is threadedly engaged with said stem portion”. The Office Action asserts that the wrench 32 comprises an elongated driver shaft. Even assuming arguendo that the wrench 32 could be construed as an elongated driver shaft and that the prosthesis 12 could be construed as a stem portion, the wrench 32 is clearly not in any way “threadedly engaged” with the prosthesis 12, as recited in independent claim 50. Indeed, the only contact between the wrench 32 and the prosthesis 12 is the engagement of the gear head 34 with the gear teeth 26 on the pins 20. However, the intermeshing engagement between the gear head 34 and the gear teeth 26 clearly does not constitute threading engagement between the wrench 32 and the prosthesis 12. Furthermore, the Office Action does not set forth any grounds or basis whatsoever as to how the wrench is in any way “threadedly engaged” with the prosthesis 12. Accordingly, a *prima facie* case of anticipation has not been established with regard to independent claim 50.

Since Doty fails to disclose each of the elements and features recited in independent claim 50, the assertion that Doty anticipates independent claim 50 is improper. Accordingly, withdrawal of the rejection of independent claim 50 and allowance of the same is requested. Claim 40 depends from independent claim 50, and is therefore submitted to be patentable for at least the reasons supporting the patentability of independent claim 50.

Rewritten Independent Claim 73

Rewritten independent claim 73 recites, among other elements and features, that “said stem portion has opposite top and bottom bone engaging surfaces with said height of said stem portion defined between said opposite top and bottom bone engaging surfaces”, and “wherein said rounded leading end portion of said stem portion defines a curvature extending along said height between said opposite top and bottom bone engaging surfaces”. The Office Action asserts that the prosthesis 12 constitutes a stem portion. Although the prosthesis 12 appears to have a height defined between opposite top and bottom bone engaging surfaces (i.e., the flat upper and

lower surfaces through which the openings 24, 25 extend) and the prosthesis 12 appears to have a curved side surface, the curved side surface does not define “a curvature extending along said height between said opposite top and bottom bone engaging surfaces”, as recited in independent claim 73. Instead, the curvature of the prosthesis extends laterally across the width of the prosthesis 12 and between the lateral side surfaces, and not along a height of the prosthesis 23 between the upper and lower bone engaging surfaces. Indeed, as clearly shown in Figure 2, the end surface of the prosthesis 12 extending between the upper and lower vertebrae (i.e., along the implant height), is straight and does not define “a curvature extending along said height between said opposite top and bottom bone engaging surfaces”, as recited in independent claim 73. Furthermore, the Office Action does not set forth any grounds or basis whatsoever as to how the prosthesis 12 includes “a rounded leading end portion” that “defines a curvature extending along said height between said opposite top and bottom bone engaging surfaces”. Accordingly, a *prima facie* case of anticipation has not been established with regard to independent claim 73.

Since Doty fails to disclose each of the elements and features recited in independent claim 73, the assertion that Doty anticipates independent claim 73 is improper. Accordingly, withdrawal of the rejection of independent claim 73 and allowance of the same is requested. Claim 39 depends from independent claim 73, and is therefore submitted to be patentable for at least the reasons supporting the patentability of independent claim 73.

Independent Claim 71

Independent claim 71 has been rejected as being anticipated by Doty. The Applicant notes the indication in the Office Action that “[c]laims are being treated as product by process claims”, and that “these claims are not limited to the manipulation of the recited steps, only the structure implied by the steps”. (See page 2 of the Office Action). However, independent claim 71 is clearly not a product by process claim, but is instead a surgical method claim directed to “[a] method for performing a surgical procedure on adjacent vertebrae having a spondylolisthesis condition”. Additionally, in order for a reference to anticipate a method claim, the reference must disclose each of the recited steps or acts, and not merely a structure implied by the recited steps or act. Furthermore, the Applicant is uncertain as to what structure is being construed as implied by the steps and acts recited in independent claim 71. If this assertion is maintained, the

Applicant respectfully requests clarification as to the specifics regarding how the method recited in independent claim 71 is being construed as a product by process claim and/or what structure is implied by the steps and acts recited in independent claim 71.

Nevertheless, the Applicant submits that Doty does not disclose each of the steps and features recited in independent method claim 71. Specifically, Doty does not disclose “a tubular sleeve”, or the steps of “advancing a surgical device through the tubular sleeve toward the intervertebral space” and/or “transmitting an axial reduction force to the anteriorly offset vertebra to reduce the spondylolisthesis condition”. The Applicant has thoroughly reviewed Doty and can find no reference whatsoever regarding these recited features and steps. In particular, Doty fails to disclose any element or structure that could be construed as “a tubular sleeve”, much less the recited step of “advancing a surgical device through the tubular sleeve toward the intervertebral space”.

Furthermore, the Office Action does not set forth any grounds or basis regarding how Doty discloses “a tubular sleeve” or the step of “advancing a surgical device through the tubular sleeve toward the intervertebral space”, or how the Doty device is used in “transmitting an axial reduction force to the anteriorly offset vertebra to reduce the spondylolisthesis condition”. Accordingly, a *prima facie* case of anticipation has not been established with regard to independent claim 71.

Since the Office Action fails to set forth sufficient grounds as to how each and every element and step recited in independent claim 71 is disclosed in Doty, the assertion that Doty anticipates independent claim 71 is improper. Accordingly, withdrawal of the rejection of independent claim 71 and allowance of the same is requested.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that Applicant's application is in condition for allowance with pending claims 15-23, 39-43, 45-46, 50-52, 65, 67, 71 and 73.

Reconsideration of the subject application is respectfully requested. Timely action towards a Notice of Allowability is hereby solicited. The Examiner is encouraged to contact the undersigned by telephone to resolve any outstanding matters concerning the subject application.

Respectfully submitted,

By: 

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